



42516

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Eric A. Whitehill

Serial No.: 10/021,062

Filed: December 19, 2001

FOR: A SYSTEM AND METHOD FOR
USING DESTINATION-DIRECTED
SPREADING CODES IN A MULTI-
CHANNEL METROPOLITAN AREA
WIRELESS COMMUNICATIONS
NETWORK

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525

Group Art Unit: 2661

Examiner: Not Assigned

RECEIVED
JUN 12 2002
Technology Center 2600

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

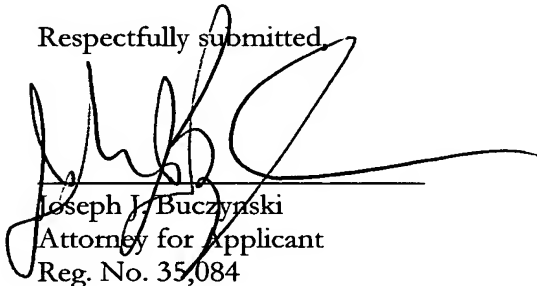
In accordance with 37 C.F.R. §§ 1.56 and 1.97-1.98, Applicants hereby transmit copies of the documents listed in the attached Form PTO-1449, which may be deemed material to the examination of the above-identified application.

All documents, with the exception of French Patent FR2683326, are in English and require no statement of relevance. Regarding French Patent FR2683326, an English abstract is provided as a brief statement of relevance to the above identified Application as required under 37 C.F.R. § 1.98. Also, since the present Information Disclosure Statement is being filed prior to issuance of a first Office Action on the merits, no certification under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(b) is required.

The Examiner is requested to consider the attached documents in connection with the above-identified application and to return a copy of Form PTO-1449 to the Applicants with the Examiner's initials in the spaces provided.

Submission of this Information Disclosure Statement does not constitute an admission by the Applicants as to the materiality of the attached documents to the application, nor do the Applicants waive any right to challenge the validity of the documents as prior art should such action be deemed appropriate. Furthermore, the Examiner is asked to consider the Industry Standard Documents (i.e. the IEEE Standards) referenced in the background of the above identified Application. Printed copies of these standards have not been included to minimize the existing volume of reference material provided but appear to be available online. If copies are required, please contact the Attorney listed below.

Respectfully submitted,



Joseph J. Buczynski
Attorney for Applicant
Reg. No. 35,084

Roylance, Abrams, Berdo & Goodman, L.L.P.
1300 19th Street, N.W., Suite 600
Washington, D.C. 20036-2680
(202) 659-9076

Dated: June 11, 2002



RECEIVED
JUN 13 2002
Technology Center 2600

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	ATTY. DOCKET NO. 42516	SERIAL NO. 10/021,062
	APPLICANT Eric A. Whitehill	
	FILING DATE December 19, 2001	GROUP 2661

U.S. Patent Documents

Examiner Initial	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	6,349,210	02/19/02	Li	455	450	11/03/00
	6,349,091	02/19/02	Li	370	238	11/07/00
	6,327,300	12/04/01	Souissi et al.	375	219	10/25/99
	6,304,556	10/16/01	Haas	370	254	08/24/98
	6,285,892	09/04/01	Hulyalkar	455	574	11/24/98
	6,275,707	08/14/01	Reed et al.	455	456	10/08/99
	6,249,516	06/19/01	Brownrigg et al.	370	338	01/27/00
	6,246,875	06/12/01	Seazholtz et al.	455	432	03/26/99
	6,240,294	05/29/01	Hamilton et al.	455	456	05/30/97
	6,229,842	05/08/01	Schulist et al.	375	148	07/16/98
	6,223,240	04/24/01	Odenwald et al.	710	129	01/31/00
	6,208,870	03/27/01	Lorello et al.	455	466	06/01/99
	6,192,230	02/20/01	Van Bokhorst et al.	455	343	09/27/93
	6,192,053	02/20/01	Angelico et al.	370	448	09/07/95
	6,178,337	01/23/01	Spartz et al.	455	561	06/19/97
	6,163,699	12/19/00	Naor et al.	455	453	09/15/97
	6,147,975	11/14/00	Bowman-Amuah	370	252	06/02/99
	6,132,306	10/17/00	Trompower	453	11.1	03/29/96
	6,130,881	10/10/00	Stiller et al.	370	238	04/20/98
	6,122,690	09/19/00	Nannetti et al.	710	102	04/17/98
	6,115,580	09/05/00	Chuprun et al.	455	1	09/08/98
	6,108,738	08/22/00	Chambers et al.	710	113	06/10/97
	6,104,712	08/15/00	Robert et al.	370	389	02/22/99
	6,078,566	06/20/00	Kikinis	370	286	04/28/98
	6,067,291	05/23/00	Kamerman et al.	370	338	09/23/97
	6,064,626	05/16/00	Stevens	365	233	07/31/98
	6,052,752	04/18/00	Kwon	710	126	11/14/96
	6,052,594	04/18/00	Chuang et al.	455	450	04/30/97
	6,047,330	04/04/00	Stracke Jr.	709	238	01/20/98
	6,044,062	03/28/00	Brownrigg et al.	370	238	12/06/96
	6,034,542	03/07/00	Ridgeway	326	39	10/14/97
	6,029,217	02/22/00	Arimilli et al.	710	107	10/03/94
	6,028,853	02/22/00	Haartsen	370	338	06/06/97
	5,991,279	12/23/99	Haugli et al.	370	311	12/04/96
	5,987,033	11/16/99	Boer et al.	370	445	09/08/97
	5,987,011	11/16/99	Toh	370	331	08/30/96
	5,943,322	08/24/99	Mayor et al.	370	280	04/24/96
	5,936,953	08/10/99	Simmons	370	364	12/18/97


RECEIVED
JUN 12 2002
Technology Center 2600

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	ATTY. DOCKET NO. 42516	SERIAL NO. 10/021,062
	APPLICANT Eric A. Whitehill	
	FILING DATE December 19, 2001	GROUP 2661

U.S. Patent Documents

Examiner Initial	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	5,909,651	06/01/99	Chander et al.	455	466	05/05/97
	5,903,559	05/11/99	Acharya et al.	370	355	12/20/96
	5,896,561	04/20/99	Schrader et al.	455	67.1	12/23/96
	5,886,992	03/23/99	Raatikainen et al.	370	410	04/15/97
	5,881,372	03/09/99	Kruys	455	113	12/01/95
	5,881,095	03/09/99	Cadd	375	202	05/01/97
	5,877,724	03/03/99	Davis	342	357	03/25/97
	5,870,350	02/09/99	Bertin et al.	365	233	05/21/97
	5,857,084	01/05/99	Klein	395	309	10/02/96
	5,845,097	12/01/98	Kang et al.	395	297	06/03/96
	5,844,905	12/01/98	McKay et al.	370	443	07/09/96
	5,822,309	10/13/98	Ayanoglu et al.	370	315	06/15/95
	5,809,518	09/15/98	Lee	711	115	05/20/96
	5,805,977	09/08/98	Hill et al.	455	31.3	04/01/96
	5,805,842	09/08/98	Nagarajet al.	395	306	09/26/95
	5,805,593	09/08/98	Busche	370	396	09/26/95
	5,796,741	08/18/98	Saito et al.	370	439	03/05/96
	5,796,732	08/18/98	Mazzola et al.	370	362	03/28/96
	5,794,154	08/11/98	Bar-On et al.	455	509	07/26/96
	5,787,080	07/28/98	Hulyalkar et al.	370	348	06/03/96
	5,781,540	07/14/98	Malcolm et al.	370	321	06/30/95
	5,774,876	06/30/98	Wooley et al.	705	28	06/26/96
	5,745,483	04/28/98	Nakagawa et al.	370	335	09/29/95
	5,717,689	02/10/98	Ayanoglu	370	349	10/10/95
	5,706,428	01/06/98	Boer et al.	395	200	03/14/96
	5,701,294	12/23/97	Ward et al.	370	252	10/02/95
	5,696,903	12/09/97	Mahany	395	200.58	04/29/94
	5,687,194	11/11/97	Paneth et al.	375	283	04/22/93
	5,684,794	11/04/97	Lopez et al.	370	337	01/25/96
	5,680,392	10/21/97	Semaan	370	261	01/16/96
	5,652,751	07/29/97	Sharony	370	227	03/26/96
	5,644,576	07/01/97	Bauchot et al.	370	437	05/16/95
	5,642,377	06/24/97	Chung et al.	375	200	07/25/95
	5,631,897	05/20/97	Pacheco et al.	370	237	10/01/93
	5,627,976	05/06/97	McFarland et al.	395	308	03/20/95
	5,623,495	04/22/97	Eng et al.	370	397	06/15/95
	5,621,732	04/15/97	Osawa	370	79	04/18/95
	5,618,045	04/08/97	Kagan et al.	463	40	02/08/95
	5,615,212	03/25/97	Ruszczzyk et al.	370	433	09/11/95



RECEIVED
 JUN 12 2002
 Technology Center 2600

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	ATTY. DOCKET NO. 42516 APPLICANT Eric A. Whitehill FILING DATE December 19, 2001	SERIAL NO. 10/021,062 GROUP 2661
--	---	---

U.S. Patent Documents

		Patent No.	Date	Patentee	Class	Sub-class	Filing Date
		5,572,528	11/05/96	Shuen	370	85.13	03/20/95
		5,555,540	09/10/96	Radke	370	16.1	02/17/95
		5,555,425	09/10/96	Zeller et al.	395	800	03/07/90
		5,517,491	05/14/96	Nanni et al.	370	29	05/05/95
		5,502,722	03/26/96	Fulghum	370	69.1	08/01/94
		5,424,747	06/13/95	Chazelas	342	70	04/09/93
		5,412,654	05/02/95	Perkins	370	94.1	01/10/94
		5,392,450	02/21/95	Nossen	455	12.1	01/08/92
		5,317,566	05/31/94	Joshi	370	60	08/18/93
		5,241,542	08/31/93	Natarajan et al.	370	95.3	08/23/91
		5,233,604	08/03/93	Ahmadi et al.	370	60	04/28/92
		5,231,634	07/27/93	Giles et al.	370	95.1	12/18/91
		5,068,916	11/26/91	Harrison et al.	455	39	10/29/90
		5,034,961	07/23/91	Adams	375	130	06/03/88
		4,910,521	03/20/90	Mellon	342	45	08/03/31
		4,747,130	05/24/88	Ho	379	269	12/17/85
		4,742,357	05/03/88	Rackley	342	457	09/17/86
		4,736,371	04/05/88	Tejima et al.	370	95	12/29/86
		4,617,656	10/14/86	Kobayashi et al.	370	74	01/02/86
		4,494,192	01/15/85	Lew et al.	364	200	07/21/82

Published U.S. Patent Application

		Pub. No.	Pub. Date	Patentee	Class	Sub-class	Filing Date
		2001/0053699	12/20/01	McCrary et al.	455	513	02/06/01

Foreign Patent Documents or Foreign Patent Applications

		Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
		EP 0513841 A2 /	11/19/92	EPO			X	
		EP 0513841 A3 /	11/19/92	EPO			X	
		EP 0924890 A2 ✓	06/23/99	EPO			X	
		EP 0627827 A2 ✓	12/07/94	EPO			X	
		WO 9912302 ✓	03/11/99	WIPO			X	
		WO 9839936 ✓	09/11/98	WIPO			X	



RECEIVED
JUN 12 2002
Technology Center 2600

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	ATTY. DOCKET NO. 42516	SERIAL NO. 10/021,062
	APPLICANT Eric A. Whitehill	
	FILING DATE December 19, 2001	GROUP 2661

Foreign Patent Documents or Foreign Patent Applications

	WO 9724005 ✓	07/03/97	WIPO			X	
	WO 9608884 ✓	03/21/96	WIPO			X	
	WO 0235253 ✓	05/02/02	WIPO			X	
	WO 0137483 ✓	05/25/01	WIPO			X	
	WO 0137482 ✓	05/25/01	WIPO			X	
	WO 0137481 ✓	05/25/01	WIPO			X	
	WO 0135567 ✓	05/17/01	WIPO			X	
	WO 0133770 ✓	05/10/01	WIPO			X	
	WO 0110154 ✓	02/08/01	WIPO			X	
	WO 0034932 ✓	06/15/00	WIPO			X	
	CA 2132180 ✓	03/16/96	Canada			X	
	FR 2683326 ✓	07/05/93	France				X

Other Documents (including Author, Title, Date, Pertinent Pages, etc.)

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
		Wong et al., "Soft Handoffs in CDMA Mobile Systems", December 1997, IEEE Personal Communications ✓
		Wong et al., "A Pattern Recognition System for Handoff Algorithms", July 2000, IEEE Journal on Selected Areas in Communications, vol. 18, no. 7 ✓
		Andras G. Valko, "Cellular IP: A New Approach to Internet Host Mobility", January 1999, ACM Computer Communication Review ✓
		Richard North, Dale Bryan and Dennis Baker, "Wireless Networked Radios: Comparison of Military, Commercial, and R&D Protocols", February 28-March 3, 1999, 2 nd Annual UCSD Conference on Wireless Communications, San Diego CA ✓
		Benjamin B. Peterson, Chris Kmiecik, Richard Hartnett, Patrick M. Thompson, Jose Mendoza and Hung Nguyen, "Spread Spectrum Indoor Geolocation", August 1998, Navigation: Journal of the Institute of Navigation, vol. 45, no. 2, summer 1998 ✓
		Josh Broch, David A. Maltz, David B. Johnson, Yih-Chun Hu and Jorjeta Jetcheva, "A Performance Comparison of Multi-Hop Wireless Ad Hoc Network Routing Protocols", October 25-30, 1998, Proceedings of the 4 th Annual ACM/IEEE International Conference on Mobile Computing and Networking ✓
		C. David Young, "USAP: A Unifying Dynamic Distributed Multichannel TDMA Slot Assignment Protocol" ✓
		Chip Elliott and Bob Heile, "Self-Organizing, Self-Healing Wireless Networks", 2000 IEEE ✓



Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	ATTY. DOCKET NO. 42516	SERIAL NO. 10/021,062
	APPLICANT Eric A. Whitehill	
	FILING DATE December 19, 2001	GROUP 2661

Other Documents (including Author, Title, Date, Pertinent Pages, etc.)

		J.J. Garcia-Luna-Aceves and Asimakis Tzamaloukas, "Reversing the Collision-Avoidance Handshake in Wireless Networks" ✓
		J.J. Garcia-Luna-Aceves and Marcelo Spohn, "Transmission-Efficient Routing in Wireless Networks Using Link-State Information" ✓
		J.J. Garcia-Luna-Aceves and Ewerton L. Madruga, "The Core-Assisted Mesh Protocol", August 1999, IEEE Journal on Selected Areas in Communications, vol. 17, no. 8 ✓
		Ad Kamerman and Guido Aben, "Net Throughput with IEEE 802.11 Wireless LANs" ✓
		J.R. McChesney and R.J. Saulitis, "Optimization of an Adaptive Link Control Protocol for Multimedia Packet Radio Networks" ✓
		Ram Ramanathan and Regina Rosales-Hain, "Topology Control of Multihop Wireless Networks using Transmit Power Adjustment" ✓
		Ram Ramanathan and Martha E. Steenstrup, "Hierarchically-Organized, Multihop Mobile Wireless Networks for Quality-of-Service Support" ✓
		Martha E. Steenstrup, "Dynamic Multipoint Virtual Circuits for Multimedia Traffic in Multihop Mobile Wireless Networks" ✓
		Zhenyu Tang and J.J. Garcia-Luna-Aceves, "Collision-Avoidance Transmission Scheduling for Ad-Hoc Networks" ✓
		George Vardakas and Wendell Kishaba, "QoS Networking With Adaptive Link Control and Tactical Multi-Channel Software Radios" ✓
		Arvind R. Raghavan and Carl W. Baum, "An Unslotted Multichannel Channel-Access Protocol for Distributed Direct Sequence Networks", Mobile Networks and Applications 5 (2000) pp. 49-56 ✓

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED
JUN 12 2002
Technology Center 2800